

TROPICAL RAINFALL MEASURING MISSION

August 27, 2001 - September 2, 2001

DOY 239 - 245

Day of Mission 1369 - 1375

TRMM MISSION OPERATIONS

- TRMM is flying in the -X Forward direction as of August 23rd (01-235) at 19:42:03z.
- Yaw maneuver #62 to +X Forward is currently scheduled for September 13th (01-256).
- Delta-V #333 is scheduled for September 8th (01-251), using the ISP thrusters.
- The Beta angle range for 01-246 to 01-252 is -27.3° to -15.1° .
- The next Monthly Status Review (MSR) is scheduled for September 26th (01-269).
- The next Configuration Control Board (CCB) is scheduled for October 2nd (01-275).

TRMM SUBSYSTEM OPERATIONS

Attitude Control System (ACS)

01-236 (Saturday, September 1st)

Delta-V maneuver #332 was successfully conducted at 14:21:18z and 15:07:38z for durations of 34.000 and 15.125 seconds respectively, using the ISP thrusters. The off-modulation of the -Pitch thruster (#6) for burns 1 and 2 was 36.0% and 27.3% (64.0% and 72.7% on time). The remaining fuel is 348.569 kg, the current GN2 pressure is 372.6565 psia, and the final apogee and perigee height is 407.16 km x 399.70 km.

Flight Data System (FDS)/Command & Data Handling (C&DH)

The UTCf remains at 3135996.818135 seconds. The current drift value is +430 μ s. The Frequency Standard remains at x'7D2' with a current drift rate of -1.3 μ s/hr.

Reaction Control Subsystem (RCS)

The RCS subsystem performed nominally during this period.

Power Subsystem

The Power subsystem performed nominally during this period.

Electrical Subsystem

The Electrical subsystem performed nominally during this period.

Thermal Subsystem

The Thermal subsystem performed nominally during this period.

Deployables Subsystem

The Deployables subsystem performed nominally during this period.

RF/Communications Subsystem

The RF/Communications subsystem performed nominally during this period. Currently, there is insufficient bandwidth to receive event dump packets at the 1/4 kbps rate while contingency mode packets are down-linked every 4 seconds.

SPACECRAFT INSTRUMENTS

CERES

CERES was powered off on 01-149 (Tuesday May 29th, 2001).

LIS

The LIS instrument performed nominally during this period.

PR

The PR instrument performed nominally during this period.

01-239 (Monday, August 27th)

A PR Logampchk command request was performed.

01-242 (Thursday, August 30th)

PR External Calibrations were performed for bins 35 and 50.

01-243 (Friday, August 31st)

A PR External Calibration was performed for bin 68.

The list of Internal Calibration times over Australia in which PR was not radiating is shown below:

01-239/14:51:31z - 14:56:39z

01-239/21:26:50z - 21:29:05z

01-240/13:58:56z - 14:01:08z

01-240/22:07:14z - 22:09:22z

01-241/21:12:17z - 21:14:27z

01-242/20:17:17z - 20:19:30z

01-243/12:46:52z - 12:52:00z

01-243/19:22:16z - 19:24:30z

01-243/20:58:29z - 20:59:38z

01-244/20:02:31z - 20:04:39z

01-245/19:07:43z - 19:09:55z

TMI

The TMI instrument performed nominally during this period.

VIRS

The VIRS instrument performed nominally during this period.

GROUND SYSTEM

A MOPSS S/W rollover problem that would have occurred on September 9th was repaired by the development team and was verified by the test team.

The center-wide phone outage that was scheduled for August 31st - September 3rd occurred without incident.

Event Reports

ER #246: WSC experienced problems and the 01/245 TDS 00:07z event had multiple sequence errors. VR-4 required a re-transmission of data. WSC reported that HST was simultaneously affected and they assigned TTR # 24031 to the incident. WSC is still investigating the cause of the problem.

Generic Late Acquisition Reports (for TTRs 19639)

No new generic late acquisitions occurred during this period.

New Anomalies

No new anomalies occurred during this period.

Recurring/Open Anomalies

No open anomalies recurred during this period.

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